

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A microchip laser arrangement, comprising

a first chip of active material comprising erbium-doped glass, operative to emit radiation in a near infrared spectral region when optically pumped,

a second chip of optically bleachable solid material, which can be bleached by optical radiation in the said near infrared spectral region, said second chip being bonded to said first chip to form a monolithic body,

a pump diode laser operation to optically ~~to excite~~ pump said active material, and

a first and second mirror enclosing said first chip and second chip,. In order to form a resonant laser cavity,

wherein said optically bleachable material comprises a cobalt-doped crystal of spinel type,

wherein the laser diode is arranged for longitudinal pumping of light into the active material,

wherein the chip of optically bleachable material is positioned closer to the diode laser than the chip of active material, in order to light emitted by the diode to pass through the bleachable material before entering the active material, and

wherein the thickness of the chip of optically bleachable material is at least 100 μm .

2. (Currently Amended) An arrangement as claimed in claim 1, wherein the active material ~~is comprises erbium-doped glass~~, operative to emit radiation at 1.54 μm when optically pumped.

3. (Previously Presented) An arrangement as claimed in claim 1, wherein the length of the chip of active material, in the propagation direction of the laser light, is smaller than about 5 mm.

4. (Canceled)

5. (Canceled)

6. (Original) An arrangement as claimed in claim 1, wherein the laser diode emits light in a wavelength range between 940 nm and 1000 nm.

7. (Previously Presented) An arrangement as claimed in claim 6, wherein the laser diode is an InGaAs diode emitting light at 970 nm.

8. (Canceled)

9. (Original) An arrangement as claimed in claim 1, further comprising at least one lens for focusing the light from the diode.

10. (Original) An arrangement as claimed in claim 1, further comprising an optical fiber for guiding light from the diode to the active material.

11. (Canceled)

12. (Currently Amended) An arrangement as claimed in claim 1, wherein mirrors in the form of dielectric stacks are provided ~~upon~~ on the end surfaces of the monolithic body, in order to form a resonant laser cavity enclosing the active material and the optically bleachable material.

13. (Original) An arrangement as claimed in claim 1, wherein the optically bleachable material is comprised of a cobalt-doped crystal selected among MgAl_2O_4 , ZnAl_2O_4 and LiGa_5O_8 .

14. (Previously Presented) An arrangement as claimed in claim 1, wherein the length of the chip of active material, in the propagation direction of the laser light, is smaller than about 1 mm.

15. (Canceled)

16. (Previously Presented) An arrangement as claimed in claim 1, wherein the pump diode laser is a continuous-wave diode laser.

17. (Previously Presented) An arrangement as claimed in claim 16,
wherein the pump diode laser has an output power of less than 1 Watt.